



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

May 31, 1994

TO: ALL HOLDERS OF OPERATING LICENSES FOR NUCLEAR POWER REACTORS

SUBJECT: REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS (GENERIC LETTER 94-01)

The U.S. Nuclear Regulatory Commission (NRC) is issuing this generic letter to advise licensees that they may request a license amendment to remove accelerated testing and special reporting requirements for emergency diesel generators (EDGs) from plant technical specifications (TS). The NRC developed this line-item TS improvement in response to the Commission decision on SECY-93-044, "Resolution of Generic Safety Issue B-56, 'Diesel Generator Reliability'." Enclosure 1 is the guidance on preparing the amendment request and Enclosure 2 is the model TS for this change.

In Option 4 of SECY-93-044, the staff recommended that licensees adopt the accelerated testing provisions of the improved Standard Technical Specifications with an option to relocate accelerated testing requirements for EDGs from the TS to the maintenance program after the maintenance rule goes into effect. However, after further consideration, the staff has concluded that it is not necessary to await the effective date of the maintenance rule to remove the associated TS requirements nor is it necessary to relocate accelerated testing requirements to the maintenance program. Licensees may now implement the provisions of the maintenance rule for EDGs, including the applicable regulatory guidance which will provide a program to assure EDG performance. Therefore, the requirements for accelerated testing of individual EDGs would no longer exist.

Licensees may request the removal of the TS provisions for accelerated testing and special reporting requirements for EDGs at this time. However, when requesting this license amendment, licensees must commit to implement within 90 days of the issuance of the license amendment a maintenance program for monitoring and maintaining EDG performance consistent with the provisions of Section 50.65 of Title 10 of the Code of Federal Regulations (10 CFR 50.65), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance (as applicable to EDGs) of Regulatory Guide (RG) 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The NRC staff developed RG 1.160 to provide guidance for complying with the provisions of 10 CFR 50.65.

Some licensees do not have TS requirements for accelerated testing of EDGs and reporting each EDG failure to the NRC, but may have made a docketed commitment to such actions. In such cases, licensees may request relief from a docketed commitment for accelerated testing and special reporting requirements for

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EDGs. Such requests should be made on the basis of implementation of the provisions of the maintenance rule and associated regulatory guidance (as applicable to EDGs) within 90 days of NRC granting relief from a docketed commitment.

Licensees that plan to adopt this line-item TS improvement are encouraged to propose TS changes that are consistent with the enclosed guidance in Enclosures 1 and 2. Licensees that plan to request relief from a docketed commitment to accelerated testing of EDGs and special reporting of EDG failures are encouraged to propose such requests consistent with the guidance in Enclosure 1.

Licensee action to propose TS changes or relief from a docketed commitment under the guidance of this generic letter is voluntary. Therefore, such action is not a backfit under the provisions of 10 CFR 50.109. As such, the staff did not perform a backfit analysis.

The voluntary information collections contained in this request are covered by the Office of Management and Budget clearance number 3150-0011, which expires June 30, 1994. The public reporting burden for this voluntary collection of information is estimated to average 40 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this voluntary collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0011), Office of Management and Budget, Washington, D.C. 20503.

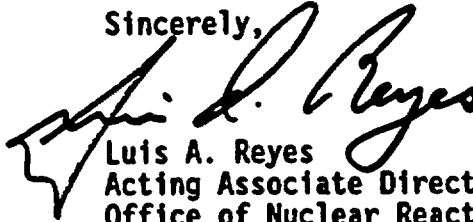
Compliance with the following request for information is voluntary. The information would assist NRC in evaluating the cost of complying with this generic letter:

- (1) the licensee staff time and costs to prepare the amendment request
- (2) an estimate of the long-term costs or savings accruing from this TS change

May 31, 1994

If you have any questions about this matter, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation project manager.

Sincerely,



Luis A. Reyes  
Acting Associate Director for Projects  
Office of Nuclear Reactor Regulation

**Enclosures:**

1. Guidance on Preparing the Amendment Request
2. Model TS for Change
3. List of Recently Issued NRC Generic Letters

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**GUIDANCE FOR IMPLEMENTING A LINE-ITEM TECHNICAL SPECIFICATION (TS)  
IMPROVEMENT TO REMOVE ACCELERATED TESTING AND SPECIAL REPORTING  
REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS (EDGs)  
FROM PLANT TECHNICAL SPECIFICATIONS OR  
FROM DOCKETED COMMITMENTS**

**Background**

As part of the resolution of Generic Safety Issue (GSI) B-56, "Diesel Generator Reliability," the staff of the U.S. Nuclear Regulatory Commission (NRC) recommended Option 4 in SECY-93-044, "Resolution of Generic Safety Issue B-56, 'Diesel Generator Reliability'." The Commission approved Option 4 on March 25, 1993. In Option 4, the NRC staff recommended (in part) that licensees be allowed to voluntarily adopt the accelerated testing provisions of the improved Standard Technical Specifications; and upon a determination that the maintenance program conforms to the applicable guidance, the accelerated testing requirements for the EDGs could be relocated from the TS to the maintenance program when the maintenance rule goes into effect in 1996. However, after further consideration, the staff has concluded that it is not necessary to await the effective date of the maintenance rule to remove the associated TS requirements nor is it necessary to relocate accelerated testing requirements to the maintenance program. Licensees may now implement the provisions of the maintenance rule for EDGs, including the applicable regulatory guidance, which will provide a program to assure EDG performance. The elements of this program will include the performance of a detailed root cause analysis of individual EDG failures, effective corrective actions taken in response to individual EDG failures, and implementation of EDG preventive maintenance consistent with the maintenance rule.

The staff has concluded that licensees may also propose TS changes to remove special reporting requirements for EDGs from their plant TS. Licensees may also request relief from a docketed commitment for accelerated testing of EDGs and reporting each EDG failure to the NRC. Licensees would continue to comply with the provisions of 10 CFR 50.72 and 50.73 to notify NRC and report EDG failures. With this TS change or NRC relief from a docketed commitment to such actions, requirements for accelerated testing of EDGs would no longer exist.

The staff approval of this option would be contingent upon a commitment to implement, within 90 days of a license amendment, or NRC granting relief from a docketed commitment, a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance contained in Regulatory Guide (RG) 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The fulfillment of this commitment need not necessarily result in a new or separate EDG maintenance program but rather could be implemented by modification of existing maintenance program requirements that include EDGs.

## Discussion

The NRC staff developed RG 1.160 to provide flexibility for licensees to structure their maintenance program based on the risk significance of the structures, systems, and components that are within the scope of the maintenance rule. This guide endorses a Nuclear Utility Management and Resources Council (NUMARC) guideline<sup>1</sup> which gives methods acceptable to the NRC staff for complying with the provisions of the maintenance rule (10 CFR 50.65).

During the public comment period for this generic letter, the staff met with the Advisory Committee for Reactor Safeguards (ACRS). As a consequence of continuing ACRS concerns on the use of trigger values, included in a NUMARC guideline,<sup>2</sup> the NRC staff will modify RG 1.160 by removing the language on the use of trigger values for monitoring EDG performance. However, the staff intends to retain in RG 1.160 the discussion on NRC's expectations that licensees would (1) establish performance criteria for both emergency diesel generator reliability and unavailability, under paragraph (a)(2) of the maintenance rule, (2) perform appropriate root cause determination and corrective action following a single maintenance-preventable failure, and (3) establish goals and monitor subsequent EDG performance under paragraph (a)(1) of the maintenance rule if any performance criterion is not met or a second EDG maintenance-preventable failure occurs.

In addition to the focus on paragraphs (a)(1) and (2) of the maintenance rule as addressed in the NRC's expectations on implementing the guidance of RG 1.160, paragraph (a)(3) of the maintenance rule must also be met and requires (in part) that licensees make adjustments where necessary to ensure that the objective of preventing failures through maintenance is appropriately balanced against the objective of minimizing unavailability due to monitoring or preventive maintenance.

Therefore, a commitment to implement the maintenance rule consistent with the guidance of RG 1.160 as applicable for EDGs is a commitment to (1) implement the endorsed NUMARC guideline, 93-01, with the exception of the reference to NUMARC 87-00 on the use of trigger values and (2) fulfill the NRC staff expectations discussed in RG 1.160. Should licensees wish to propose an alternative to implementing the guidance of RG 1.160, to demonstrate compliance with the maintenance rule for EDGs, the NRC staff will consider such proposals.

The NRC staff finds that a commitment to implement a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of the maintenance rule and consistent with the guidance of RG 1.160 would provide a basis for the staff to approve a licensee request to remove the

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<sup>1</sup>NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," May 1993.

<sup>2</sup>Appendix D of NUMARC 87-00, Revision 1, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at LWRs," August 1991.

accelerated testing and special reporting requirements for EDGs from their plant TS. This commitment would also provide the basis for the staff to approve requests for relief from a docketed commitment to accelerated testing of EDGs and reporting each EDG failure. Licensees must commit to implementing within 90 days of the issuance of the license amendment or commitment relief the provisions of 10 CFR 50.65 and guidance of RG 1.160 for EDGs when requesting the removal of the EDG accelerated testing and special reporting requirements from their plant TS or docketed commitment. The elimination of accelerated testing requirements for EDGs closes the matter of triggers and testing for "problem diesels."

Enclosure 2 includes model EDG technical specifications which address these TS changes.

MODEL STANDARD TECHNICAL SPECIFICATIONS FOR REMOVING ACCELERATED TESTING  
AND SPECIAL REPORTING REQUIREMENTS FOR EDGs

Revisions to TS 4.8.1.1.2 (Changes are shown in bold typeface.)

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

a. At least once per 31 days on a STAGGERED TEST BASIS by:

1) through 7) no change.

*(Removes the reference to TS Table 4.8.1.1.2-1 for the test schedule.)*

Revisions to Table 4.8.1.1.2-1 (Changes are shown in bold typeface.)

TABLE 4.8.1.1.2-1  
DIESEL GENERATOR TEST SCHEDULE

(Not used)

*(Removes accelerated testing requirements for EDG's which were based on the number of failures in the last 20 and 100 valid tests.)*

Revisions to TS 4.8.1.1.3, "Reports" (Changes are shown in bold typeface.)

4.8.1.1.3 Reports (Not used)

*(10 CFR 50.72 and 50.73 address the remaining regulatory requirements for licensees to notify NRC and report individual EDG failures.)*

LIST OF RECENTLY ISSUED GENERIC LETTERS

<u>Generic Letter</u>	<u>Subject</u>	<u>Date of Issuance</u>	<u>Issued To</u>
86-10, SUPP. 1	FIRE ENDURANCE TEST ACCEPTANCE CRITERIA FOR FIRE BARRIER SYSTEMS USED TO SEPARATE REDUNDANT SAFE SHUTDOWN TRAINS WITHIN THE SAME FIRE AREA (SUPP. 1 TO GL 86-10, "IMPLEMENTATION OF FIRE PROTECTION REQUIREMENTS")	03/25/94	ALL HOLDERS OF OLs OR CPs FOR NPRs
89-10, SUPP. 6	INFORMATION ON SCHEDULE AND GROUPING, AND STAFF RESPONSES TO ADDITIONAL PUBLIC QUESTIONS	03/08/94	ALL LICENSEES OF OPERATING NUCLEAR POWER PLANTS AND HOLDERS OF CONSTRUCTION PERMITS FOR NPRs
93-08	RELOCATION OF TECHNICAL SPECIFICATION TABLES OF OF INSTRUMENT RESPONSE TIME LIMITS	12/29/93	ALL HOLDERS OF OLs FOR NPRs
93-07	MODIFICATION OF THE TECH- NICAL SPECIFICATION ADMINI- STRATIVE CONTROL REQUIRE- MENTS FOR EMERGENCY AND SECURITY PLANS	12/28/93	ALL HOLDERS OF OLs OR CPs FOR NPRs
93-06	RESEARCH RESULTS ON ON GENERIC SAFETY ISSUE 106, "PIPING AND THE USE OF HIGHLY COMBUSTIBLE GASES IN VITAL AREAS"	10/25/93	ALL HOLDERS OF OLs OR CPs FOR NPRs
93-05	LINE-ITEM TECHNICAL SPECIFICATIONS IMPROVE- MENTS TO REDUCE SURVEILLANCE REQUIREMENTS FOR TESTING DURING POWER OPERATION	09/27/93	ALL HOLDERS OF OLs OR CPs FOR NPRs

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OL = OPERATING LICENSE  
CP = CONSTRUCTION PERMIT  
NPR = NUCLEAR POWER REACTORS